

ABSTRACT

A device and method for seed-train expansion of a source of mammalian cells and their use in production of proteins expressed by the cells comprising the use of a dedicated inoculation bioreactor for expanding the cells prior to the transfer to a production bioreactor is disclosed.

The novel inoculation bioreactor is designed to facilitate an improved method of mammalian cell seed-train expansion, and is distinguished by the presence of an "inoculation well" which communicates with the interior of the bioreactor and which facilitates the growth of mammalian cells for commercial seed-train expansion.

The method comprises adding the cryopreserved cells to media within the inoculation well of the inoculation bioreactor, enabling the cells to grow to a predetermined concentration within the inoculation well by monitoring and adjusting the condition of the media and environment, and thereafter incrementally increasing the volume of the media within the reactor so that optimal cell growth is maintained.